THE EFFECT OF TIME MANAGEMENT AND CORE COMPETENCY ON THE MATHEMATICS LEARNING OUTCOMES OF CLASS VIII

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ABSTRACT

The average of mathematics learning outcomes in students class VIII of State Junior High School 2 Kasihan (SMP Negeri 2 Kasihan) is below the minimum score. The purpose of this research is to study the influences of time management and interpersonal skill on mathematics learning outcomes in students class VIII of SMP Negeri 2 Kasihan in the odd semester of the 2016/2017 academic year. The population of this research is 135 students of class VIIIA-D of SMP Negeri 2 Kasihan. Random Sampling used to take the sample data, classes B and D are the class sample, and class A is the test class. The instrument used is questionnaires time management, questionnaires interpersonal skills, and mathematic exam cases. Every device being studied through validation tests, rehabilitation tests, and especially discrimination power used to study the mathematic exam case instrument. After all the data being collected, a further study being held through the normality test and homogeneity test. From now on, the hypothetical test being held with the factorial design of 2 × 2. In the end, the ANAVA test also being conducted through t-test and Least Significant Different (LSD) to compare the highest and lowest average of every instrument. The result of this research is: (1) There is an influence of time management on mathematic learning outcomes in students class VIII of SMP Negeri 2 Kasihan in the odd semester of 2016/2017 academic year with the $F_{count} > F_{table}$ is F_{count}= 9,5073 > $F_{0,05(1,63)}$ = 3,986 in the 5% significance. (2) There is an influence of interpersonal skill on mathematic learning outcomes in students class VIII of SMP Negeri 2 Kasihan in the odd semester of 2016/2017 academic year with the $F_{count} > F_{table}$ is F_{count}= 4,6077 ≥ $F_{0,05(1,63)}$ = 3,986 in the 5% significance. (3) There is an influence of time management and interpersonal skill on mathematic learning outcomes in students class VIII of SMP Negeri 2 Kasihan in the odd semester of 2016/2017 academic year with the $F_{count} > F_{table}$ is F_{count}= 4.0858 ≤ $F_{0,05(1,63)} = 3,986$ in the 5% significance.

Keywords: Influences, Time Management, Interpersonal Skill, Mathematics Learning Outcomes

INTRODUCTION

Currently, the government has helped develop students' potential by implementing graduate qualification standards in education. This is stated in Government Regulation of the Republic of Indonesia number 13 of 2015 concerning Second Amendment to Government Regulation Number 19 of 2005 Concerning National Education Standards Chapter 1 Article 1 paragraph 5 Graduates Competency Standards are criteria regarding the qualifications of graduates' abilities that include attitudes, knowledge, and Skills. Based on the researchers' observations on the value of the Odd Semester Midterm of Grade VIII students of SMP Negeri 2 Kasihan in the 2016/2017 school year, the average mathematics learning outcomes of Grade VIII students at SMP Negeri 2 Kasihan are still below the minimum completeness value. The average cost varies between classes, even though each class is taught mathematics by the same teacher, with the same amount of time and method, and is in the same school. Most likely other factors influence it. To achieve the minimum completeness criteria for grade VIII students in grade VIII, it is necessary to improve the quality of learning. The thing that became the focus of the author in his observations in class is that some students still cannot manage their time well and are reluctant to communicate with friends and teachers.

Although every child has the same opportunity and learning time at school, another task of a student besides learning is to do the teacher's assignments both at school and at home. Students also need

to obey the school rules, including following the time of entry and return from school properly so that the learning process can run optimally. On that occasion, it takes good time management so that children do not waste time with useless things. Time management will have a positive impact on the plans and objectives that have been determined. Children are not easily stressed because they are always on time; their learning outcomes can be ensured better. Correctly made time management will be a significant investment in the future.

Another thing that can affect the educational process is Core Competency. Good communication skills, high empathy, and tolerance between students can support the learning process. Keep in mind that the source of information is limited to books or teachers and the people around him. Time management and Core Competency are thought to influence mathematics learning outcomes. Therefore, this study aims to determine whether there is an influence of time management and Core Competency on student learning outcomes in class VIII SMP Negeri 2 Kasihan Odd Semester 2016/2017 Academic Year. In general, this study aims to find out and provide suggestions for solving problems in improving mathematics learning outcomes of SMP N 2 Kasihan students. While the specific objectives of this study are: (1) To analyze the effect of time management on mathematics learning outcomes of students of class VIII odd semester of SMP N 2 Kasihan school year 2016/2017 (2) To examine the influence of Core Competency on mathematics learning outcomes of students of class VIII odd semester SMP N 2 Kasihan for the 2016/2017 school year (3) To analyze the influence of time management and Core Competency on the mathematics learning outcomes of class VIII odd semester SMP N 2 Kasihan for the 2016/2017 school year.

METHODS

This research is classified as quantitative by taking the place of Kasihan State Middle School 2 class VIII in Odd Semester 2016/2017 Academic Year. The population in this study were all students of class VIII odd semester of SMP Negeri 2 Kasihan consisting of 4 types, namely VIII A, VIII B, VIII C, and VIIID totaling 135 students. Samples were taken by random sampling technique by taking sample classes first followed by taking class trials. The results obtained class VIII B and D as a sample class and class VIII A as a trial class of 34 students. Data collection techniques used were test techniques to determine the results of learning mathematics and questionnaire techniques to assess time management and Core Competency. The instruments used were time management questionnaires, Core Competency questionnaires, and mathematics learning outcomes items. Each device was tested using a validity, reliability test, while the learning achievement-test instrument was added with a different power test. After the data is collected, an analysis prerequisite test is carried out, including a normality test and a homogeneity test. Then the hypothesis test is done using a factorial design 2. 2. Finally, the test after ANAVA is the t-test and the Least Significant Different (LSD) to compare the high and low average of each instrument.

RESULT AND DISCUSSION

A normality test is used to test whether the data obtained by each variable is normally distributed or not. The data verified is based on high and low between Time Management (TM) and Core Competency (CC) variables, which were previously divided into four categories. The normality test in this study uses the chi-square formula ($\chi 2$). The result is all data is normal.

Table 1. Normality Test Results for Independent Variables and Bound Variables

Variable	χ^2_{count}	χ^2_{table}	df	Info.
Low TM and Low CC	0,868	3,841	1	Normal
Low TM and High CC	0,113	3,841	1	Normal
High TM and Low CC	2,753	3,841	1	Normal
High TM and High CC	0,2681	3,841	1	Normal

This test serves to confirm that the group has taken (the sample used in the study) has the same or homogeneous variance. To test the similarity of the two variations, Bartlet-test is used. The decision-making criteria are the distribution of data obtained on each variable normally distributed if b < bk with a significant 5% level, where k is the number of interval classes. The result is that all data is homogeneous.

Table 2. Summary of Homogeneity Test Results

Category	Score
b	0,913
b_k	0.880
Significant Level	5%
Status	**Homogeneous**

The research hypothesis test was conducted to determine whether or not there was an influence between 1) time management on student mathematics learning outcomes, 2) Core Competency on student mathematics learning outcomes, and 3) time management and Core Competency on student mathematics learning outcomes.

Table 3. List of ANAVA Mathematics Learning Outcomes Tests

Source of Variance	df	Jk	RJK (KT)	F
Average	1	233217.6	233217.6	
Treatment: A	1	2252.4	2252.4	9.51
B	1	1091.6	1091.6	4.61
AB	1	968.0	96.0	4.09
Mistake	63	14925.5	236.9	
Amount	67	252455.2	-	

After doing research and calculated with the ANAVA test using a 2x2 factorial design, it can be concluded that for the first hypothesis obtained F_{count} of 9.5073 while F_{table} at a significant level of 5%, df: V_1= 1 and V_2= 63 which is equal to 3.986. So we get $F_{count} > F_{table}$. Thus the first hypothesis has been tested by rejecting $H_{0.1}$ and accepting $H_{1.1}$. This shows that time management affects the learning outcomes of mathematics. This influence exists because students who can manage time can manage / plan / manage their activities to maximize their learning time. Not just to set the time or hours of study, they are also able to establish determination by prioritizing it to obtain the final goal. as well as getting satisfying learning outcomes.

The second hypothesis was obtained F_{count} of 4.6078 while F_{table} at a significant level of 5%, df: V_1 = 1 and V_2 = 63, which amounted to 3.986. So we get $F_{count} > F_{table}$. Thus the second hypothesis is tested by rejecting $H_{0.2}$ and accepting $H_{1.2}$. This shows that Core Competency affects the learning outcomes of mathematics. This influence exists because students who have above average Core Competency can familiarize themselves quickly with the people around them, making it easier for students to interact with friends and teachers at school. The more friends a student has, the more comfortable he gets information, especially if students are also close to the teacher. Students who are good at conversing with friends will also get comfort in learning. He will not feel bored and always excited.

For the third hypothesis, the F_{count} of 4.0858 is obtained while the F_{table} is at a significant level of 5%, df: V_1 = 1 and V_2 = 63, equal to 3.986. So we get $F_{count} > F_{table}$. Thus, the third hypothesis has been tested by rejecting h03 and accepting h13. This shows that time management and Core Competency affect student mathematics learning outcomes.

Students who have the tenacity to organize and discipline themselves with time will be more efficient at doing various things. All will be quickly resolved, and no work will be missed. Especially if coupled with good relationships between people in one environment. Thus, in school or outside the school

environment will be a comfortable place to learn and exchange ideas about useful knowledge. Both of these will add to the key to success towards success in improving learning outcomes.

Afterward, the test after ANAVA is used, the t-test and the Least Significant Different (LSD) to compare the high and low average of each instrument. After doing the hypothesis test, the next step is to do a one-party t-test to determine which is better time management with a high or low level and to find out which is better Core Competency with a high or low level.

Table 4. Summary of T-Test Results Mathematics Learning Results

Variable	t_{count}	t_{table}	significant level	Info.
Time management	3,0653	1,9971	5%	There are differences
Core Competency	2,0813	1,9971	5%	There are differences

From the t-test on time management variables conducted on mathematics learning outcomes with a significant level of 5%, the results obtained $t_{count} = 3.0653$ and $t_{table} = 1.9971$, which means $t_{count} > t_{table}$ then H_0 is rejected, and H_1 is accepted. The conclusion is that the average in the high category is greater than the norm in the low class. So it can be said that the mathematics learning outcomes of students who have high time management are better than students who have low time management. This is because students who have high time management tend to have preparation in learning, and by having clear goals, they will surely be able to divide playtime and study time, collect assignments on time, and not waste time on pointless things.

While from the t-test on Core Competency variables that have been conducted on students' mathematics learning outcomes, with a significant level of 5%, the results of $t_{count} = 2.0813$ and $t_{table} = 1.9971$, means $t_{count} > t_{table}$ then H_0 is rejected, and H_1 is accepted. The conclusion is that the average in the high category is greater than the norm in the low class. So it can be said that the mathematics learning outcomes of students who have high Core Competency are better than students who have low Core Competency. This is because Core Competency will have an impact on social conditions in the environment. Students who have high Core Competency can quickly familiarize themselves with others (have many friends) so that the information they get will certainly quickly increase. The learning process becomes faster and more comfortable with friends and teachers who help.

The last-test is the Least Significant Different (LSD) test. LSD test was conducted to determine which had more influence on students' mathematics learning outcomes with a combination of time management factors and Core Competency.

Table 5. Summary of LSD Test Results

Case	Results	Info.
High TM, high CC - high TM, low CC	$\mu_1 \neq \mu_2$	Significant Influence
High TM, high CC - low TM, high CC	$\mu_1 \neq \mu_3$	Significant Influence
High TM, high CC - low TM, low CC	$\mu_1 \neq \mu_4$	Significant Influence
High TM, low CC - low TM, high CC	$\mu_2 = \mu_3$	There is no significant effect.
High TM, low CC - low TM, low CC	$\mu_2 = \mu_4$	There is no significant effect.
Low TM, high CC - low TM, low CC	$\mu_3 = \mu_4$	There is no significant effect.

Based on the LSD test done above, the following results can be obtained:

1) TM high, CC high ≠ TM high, CC low (significant influence). This means that the average value of mathematics learning outcomes in the category of students who have high TM, high CC has a significant difference compared to the average value of learning outcomes in the class of students who have high TM, low CC. So, even though both have a high TM, students who have higher CC will be superior. This is because students are good at placing themselves well in a group, especially in leading, having an open attitude, care, and high trust towards all their friends to make themselves

have a more extensive network of information and knowledge so that the information obtained can also be increasingly faster through the experience of people around him.

2) TM high, CC high ≠ TM low, CC strong (significant influence). This means that the average value of mathematics learning outcomes in the category of students who have high TM, high CC has a significant difference when compared to the average value of mathematics learning outcomes of students who have low TM, high CC. So, even though both have a high IQ, students whose TM is also high will be superior. This is because students with high time management can use their time appropriately and efficiently in doing various things, including in maximizing time for learning. Meanwhile, for students whose time management is not right, they will be hampered by time constraints because they cannot manage it well.
3) TM high, CC high ≠ TM low, CC low (significant influence). This means that the average value of mathematics learning outcomes in the category of students who have high TM, high CC has a significant difference when compared with the average value of learning outcomes in the type of students who have low TM, low CC. This is because students who have high TM, high IQ have two advantages, namely, they can maximize time to study, get information from many sources because they have a lot of connections, and get a comfortable atmosphere in learning because he will assume everyone around him is a valuable person.
4) high TM, low CC = low TM, high CC (no significant effect). This means that the average value of mathematics learning outcomes in the category of students who have high TM, low IQ does not have a significant difference when compared with the average value of mathematics learning outcomes of students who have low TM, high IQ. Students in the high TM category, low CC can maximize study time well. Still, the information they get is limited because it is difficult to maintain social relationships with friends and teachers. Conversely, students in the TM category are low. CC is high; he will easily get information because he is good at getting along with people around him and quickly understanding the intentions discussed by others, especially when the teacher explains. Still, he is limited by his study time or often wastes time for other things like playing. Hence, the learning outcomes are also not optimal.
5) High TM, low CC = low TM, low CC (no significant effect). This means that the average value of mathematics learning outcomes in the category of students who have high TM, low IQ does not have a significant difference when compared to the average value of mathematics learning outcomes of students who have low TM, low IQ. A student who sets aside a lot of time to study (high TM) but if he does not understand what is explained by his teacher then does not want to ask questions, and it is difficult to discuss with friends (low CC) it is suspected that his study time will not be enough to help.
6) Low TM, high CC = low TM, low CC (no significant effect). This means that the average value of mathematics learning outcomes in the category of students who have low TM, high CC does not have a significant difference when compared with the average value of learning outcomes in the category of students who have low TM, low CC. A student who has many friends and is close to his teacher, but he never learns and does not use the moment of his closeness with others to help him learn (just for fun), then his knowledge will not develop much.

Information:
TM: Time Management
CC: Core Competency
Based on the results obtained from the LSD test and t-test in this study received results that high time management combined with high Core Competency is the best condition that allows students to have the best learning achievement-test scores among the three other categories. Meanwhile, the different 3 categories, namely low TM low CC, low TM high CC, low TM low CC, can be said to have the same average value, or there is no difference.

CONCLUSION

Based on data analysis and discussion on research, it can be concluded as follows:

1. There is an influence of time management on mathematics learning outcomes of students of class VIII odd semester of State SMP Negeri 2 Kasihan the 2016/2017 academic year. This can be seen from the calculation obtained by F_{count} of 9.5073 while F_{table} at a significant level of 5%, df: v_1 = 1and v_2 = 63, which is 3,986. So we get $F_{count} > F_{table}$. Thus the first hypothesis has been tested by rejecting $H_{0.1}$ and $H_{1.1}$ accepting. This shows that time management affects the learning outcomes of mathematics.
2. There is an influence of Core Competency on mathematics learning outcomes of class VIII odd semester of SMP Negeri 2 Kasihan in the 2016/2017 school year. This can be seen from the calculations obtained F_{count} of 4.6078 while F_{table} at a significant level of 5%, df: v_1 = 1 and v_2 = 63, which is equal to 3.986. To obtain $F_{count} > F_{table}$, the second hypothesis is tested by rejecting $H_{0.2}$ and accepting $H_{1.2}$. This shows that Core Competency affects the learning outcomes of mathematics.
3. There is an influence of time management and Core Competency on mathematics learning outcomes of students of class VIII odd semester of SMP Negeri 2 Kasihan in the 2016/2017 school year. This can be seen from the calculation obtained F_{count} of 4.0858 while F_{table} at a significant level of 5%, df: v_1 = 1 and v_2 = 63, which is equal to 3.986. To obtain $F_{count} > F_{table}$, thus the third hypothesis has been tested by rejecting $H_{0.3}$ and accepting $H_{1.3}$. This shows that time management and Core Competency affect student mathematics learning outcomes.

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